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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of:

Confirmation Number: 1344

COLGATE ET AL.

Application No.: 10/673,682

Group Art Unit: 3651

Filed: September 30, 2003

Examiner: Khoi H. Tran

Title: METHODS AND APPARATUS FOR ELIMINATING INSTABILITY IN  
INTELLIGENT ASSIST DEVICES

**RESPONSE TO RESTRICTION REQUIREMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated July 20, 2004, Applicants hereby provisionally elect Species I, with traverse, which includes Claims 1, 2, 4-12, 14, and 33.

Species I-IV, as defined by the Examiner are embodiments of an apparatus. Species V is an embodiment of a method. Therefore, Applicants respectfully submit that Species V is in fact a patentably distinct invention that is related to the invention of Species I-IV and is not an embodiment of the same claimed invention as Species I-IV, and such a designation is improper. See, for example, MPEP § 806.05(e), which puts the burden on the Examiner to show distinctness between a method and an apparatus.

Moreover, it is respectfully submitted that the search and examination of the entire application can be made without serious burden and that the criteria for a proper restriction requirement as set forth in MPEP §803 have not been satisfied. MPEP §803 states that "If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions." (Emphasis added.)

Independent claim 1 recites an intelligent assist device comprising, *inter alia*, a sensor to sense a characteristic of motion imparted by a human operator to the device, and a

controller for controlling movements of the trolley, estimating an amount of oscillation in the support that does not correspond to the motion imparted by the human operator, and adjusting movements of the trolley based thereon.

Independent claim 15 recites a method for controlling movement of an overhead moveable trolley in an intelligent assist device, the method comprising sensing a characteristic of motion imparted by a human operator to the device, estimating an amount of oscillation in the device that does not correspond to the motion imparted by the human operator, and adjusting movements of the trolley based upon the estimate.

Independent claim 28 recites a method for controlling movement of an overhead moveable trolley in an intelligent assist device, the method comprising sensing a tension in a cable that extends downwardly from the trolley to a payload, controlling the trolley based on the sensed tension, determining when changes in the sensed tension are below a threshold level, and adjusting movements of the trolley based upon the changes in the sensed tension that are below the threshold level.

Independent claim 33 recites an intelligent assist device comprising, *inter alia*, a sensor operatively coupled to the support to sense a characteristic of motion imparted by a human operator to the device, and a controller for controlling movements of the trolley, identifying oscillations in the support above a threshold level, and adjusting movements of the trolley based thereon.

Independent claim 34 recites a method for controlling movement of an overhead moveable trolley in an intelligent assist device, the method comprising sensing a characteristic of motion imparted by a human operator to the device, identifying oscillations in the device above a threshold level, and adjusting movements of the trolley based upon the identification.

Therefore, regardless of which "Species" Applicants elect, the search and examination of independent claims 1 and 15 require the search and examination for sensing a characteristic of motion imparted by a human operator to an intelligent assist device, estimating an amount of oscillation in the device that does not correspond to the motion imparted by the human operator, and adjusting movements of the trolley based upon the estimate. The search and examination of independent claim 28 requires the search and examination for sensing a tension in a cable that extends downwardly from the trolley to a payload, controlling the trolley based on the sensed tension, determining when changes in the sensed tension are below a threshold level, and adjusting movements of the trolley based

upon the changes in the sensed tension that are below the threshold level. The search and examination of independent claims 33 and 34 requires the search and examination for sensing a characteristic of motion imparted by a human operator to the device, identifying oscillations in the device above a threshold level, and adjusting movements of the trolley based upon the identification. Applicants also note that dependent device claims 2-14 recite features such as a low pass filter, a band pass filter, and a rectifier and dependent method claims 16-27, and 29-32 recite features such as passing signals through a low pass filter and a band pass filter, and passing signals through a rectifier. As the search and examination of all of the claims in the application are so closely related, it is respectfully submitted that the search and examination of the entire application can be made without serious burden and that the criteria for a proper restriction has not been established.

Moreover, Applicants respectfully submit that claims 1, 4-10, and 33, at least, are generic to Species I – IV, because claims 1, 4-10, and 33 read on the embodiments of Species I-IV, as defined by the Examiner, and search and examination of the entire application can be made without serious burden. The Examiner has not given an appropriate explanation as to why restriction is proper, as required by MPEP § 808.02. In addition, claims 2, 11, and 12 also read on Species I. Therefore, Applicants respectfully submit that Claims 1, 2, 4-12, 14, and 33 are included in provisionally elected Species I.

Accordingly, reconsideration and withdrawal of the Restriction Requirement are respectfully requested.

Respectfully submitted,

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